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ABSTRACT

This paper investigated the methodological challenges related to the use of computer-mediated communication (CMC) to investigate the impact of gender identity on student perceptions of university life. This longitudinal research project at the University of Cambridge (England) sought to determine the reasons for the disparity in numbers of first-class degrees awarded to women at Cambridge compared to other United Kingdom universities. The research questions focused on the perspectives/meanings reported by men and/or women within the institution; the different gender choices associated with different values or perspectives on society, with self-concept, and with institutional social processes; and the difference in gender choices and changes over time. The paper examines issues of "democratic exchange" in CMC interviews, and discusses the lack of physical cues, anonymity, and how social status or personality are projected within the constraints of an e-mail exchange. The paper also examines questions of on-line authenticity, noting that electronic networking opens possibilities for deception, and that there was no mechanism to ensure that messages continued to come from the same person over time. The study concludes, however, that rapport via e-mail interviews is possible, and that researchers and participants can find ways to compensate for the loss of embodiment. (Contains 37 references.) (CH)

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Using Computer-mediated Communication to investigate Gender Identities in Higher Education

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Using Computer-mediated Communication to investigate Gender Identities in Higher Education

ABSTRACT

This paper will describe the use of computer-mediated communication (CMC) to investigate the impact of gender identity on students' perceptions of university life. In this study the students do not meet the researchers. They reflect on their college experiences (over the whole course of their degree) by keeping in email contact with the researchers on a day-by-day basis. However, recent studies which focus on the 'on-line' world of the Internet suggest that this innovative method may encounter problems (as well as enjoying advantages) compared to more conventional forms of research interaction. The reduced range of paralinguistic cues and the lack of nonverbal or social clues in computer-mediated communication have been well documented. On one hand these characteristics of CMC have been found to reduce feelings of being evaluated - raising hopes that non-coercive and anti-hierarchical interaction between researcher and participant might be a possibility. On the other hand, these same characteristics may make the 'facts' of identity non-essential in this form of communication - and hence impossible to investigate on-line. Identity in Cyberspace might be 'missing' - it might also be 'fantasized'.; a virtual identity offering no clues to the identity of the lived life.

I shall be discussing the methods that were adopted for a longitudinal research project funded by the University of Cambridge. The university wished to investigate why there should a greater gender disparity in terms of being awarded first class degrees at Cambridge than at almost all other UK universities. For, to a lesser or greater degree, men at Cambridge are awarded more first class degrees than women in almost all subject areas. As the researcher with responsibility for the qualitative aspects of this study I wished to examine how the institution and social processes within it shaped the gendered identity of students - and the possible implications this might have for the academic achievement of women students.

These are some of the questions I wished to explore:

What perspectives/meanings are reported by men and/or women within the institution?

- what meanings do gendered students attach to their place in the university?
- how do they define themselves in relation to it?
- what issues/factors/ people are foregrounded
- what messages are received about gendered abilities and capacities?

Are different gendered choices associated with

- different values or perspectives on society?

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- statements about self concept?
- social processes in the institution?
- earlier choices?

Are there gender differences in choices and changes over time?

- do self-confidence and self-efficacy increase over time?
- what is the impact of success or failure on self-evaluation?
- what consequences do different kinds of outcome have for self-esteem/later choices?

I was looking for a research method which would look in depth at individual and group college life. The research also needed to uncover choices and transition points - what led up to them and what followed them. A cross-sectional survey would not have supplied this material. Rather, the research focus pointed to a longitudinal study. Finally, although as a qualitative researcher I would be seeking depth rather than numerical reach, the complex educational and pastoral systems within the university of Cambridge raised the challenge of exploring the different experiences of students who might live their university lives within what, in effect, are mini-kingdoms within the wider institution. The study did not aim to be representative but it did hope to give the flavour of a variety of different faculties and colleges. Thus, to explore students gendered identities while at Cambridge University, the study needed to be in-depth, longitudinal but also able to encompass multiple narratives.

This paper will describe some implications of the method I used to conduct this research (for a full discussion of using Internet technology to conduct qualitative and quantitative research see Mann and Stewart, 2000). Since 1997, in The Graduates of the Millennium study, I have been using sequential, in-depth email interviews in an unprecedented attempt to map the social and academic experiences of a cohort of 200 undergraduates over the full course of their degree. With this online interaction, usually referred to as computer-mediated communication (CMC), the students do not meet me face-to-face (FTF). Instead, they reflect on their college experiences by keeping in e-mail contact with me on a day-by-day basis throughout each semester.

The students were in no doubt that email was a practical and effective method for conducting research in a 21st century university environment.

> People of our generation use e-mail to run our lives, we keep in touch with our families, our friends, our supervisors, potential employees, we organize parties, write love letters and give advice over e-mail to people who live down the hall and to people on the other side of the world - so I see no reason why it should not be used in this way either!

I think email is the best possible medium for a study of this kind in a university environment. I don't think many non-students realize quite how addictive email can be. Checking email at least twice a day becomes compulsive and when terminals are available in college it becomes the principle method of work avoidance. So, while mail in pigeonholes is customarily glanced at and most of it discarded out of hand email tends to be read. And since many people have the alternative of replying or going back to the work they were trying to avoid, it is often replied to.

They also appreciated the practical advantages of the method:

Email is much the best way of researching opinions on such a large scale as it's still personal but takes much less time and effort to reply to than any other means of communication.

It is very easy for those involved to be able to respond quickly, and without much hassle. This is vital for encouraging people's comments. If I had to sit down and write to you, then I would never be bothered. Also it's free - we don't have to pay for stamps!

Obviously over time everyone's feelings about university life changes so it is good to have a method that you can update quickly and easily and whenever the mood strikes you.

I am confident that the email interaction gave greater access to the narrative accounts of many more male and female students - across long periods of time - than could be accessed in any other way. But what is the research value of these narrative accounts? Do they give authentic insights into the development of gender identities in a higher education setting - or is this high tech research as ephemeral as the virtual money owned by Internet millionaires?

Let us consider some of the methodological challenges here. It is generally accepted that qualitative researchers use multiple methods to collect rich, descriptive, contextually-situated data in order to seek understanding of human experience or relationships within a system or culture. Furthermore, the investigator is usually considered a 'human instrument' of research who is a physical presence in the field. As feminist researchers have pointed out, the personal characteristics of the 'embodied' interviewer have a crucial impact on the research outcome. But what concerns will arise when CMC is used and the researcher becomes virtual? Are we to welcome a form of interview interaction untainted by the hierarchical power relations which can develop when social cues, such as gender, ethnicity, age and rank are more visible? Or will the absence of personal cues such as facial expression, body language, voice and dress decrease the possibility of establishing rapport - thus inhibiting free exchange between interviewer and participant? And is it appropriate to attempt to study identity using a medium which in its very essence problematises identity by allowing interactants - researcher and participants - the option of playing with presentation of self in a virtual environment?

The issues of first 'democratic exchange in interviews' and second 'authenticity between interactants online' are the two areas I shall discuss with reference to the graduates of the Millennium study.

Democratic exchange in interviews

There are suggestions that, working online, the lack of physical cues frees participants from status-based prejudices and the fear of being judged by any criteria other than what an individual has to say (Bashier, 1990: 54). It is held that barriers common to FTF communication will disappear, eliminating from research interaction the often 'irrational biases and prejudices that disadvantage "outsider" or low-status groups' (Lee, 1996: *online*).

> You can't excuse or dismiss someone because you see that they are short and 'everyone knows that people who are short have certain kinds of complexes'. (Smith-Stoner, 1999: *personal email*)

> Unless you choose to disclose it, no one knows whether you are male, female, tall, short, a redhead or blond, black, white, Asian, Latino, in a wheelchair or not. (Kane, 1994: 204)

Some hope that CMC will allow new forms of social interaction with wider participation and openness, a 'potentially egalitarian network' (Spender, 1995: 227). They consider that when anonymity is the rule a 'fully honest, unfiltered, open, unbiased discussion' is possible (Whittle, 1997: 124).

When discussing the Internet in general, the optimistic view that CMC will be marked by universal altruism, equality, honesty and mutual respect is not shared by everyone, and there are reservations about '[u]topian visions of class- and gender-free societies' (Herring, 1996b: 1). Some commentators argue that virtual spaces are so constrained by powerful structural forces of class, race and gender that they cannot be equally friendly environments for everyone (Kramarae, 1995: 53–54). In some online contexts, 'anonymous participants are assumed to be white and male until proven otherwise' (Kendall, 1999: 66;) and 'racist and homophobic outbreaks are regular events' (Rheingold, 1994: 185). In addition, classes traditionally given low status are more 'excluded from participation, privilege, and responsibility in the information society than they have been from the dominant groups in the past' (Turkle, 1984: 244).

Nor can we assume that anonymity will fulfill its egalitarian promise. In contrast, it may allow 'predatory mayhem' (Whittle, 1997: 123). Power relations remain because, even online, we are incapable of 'bracketing-off' (Fraser, 1994: 83) differences in status and culture. For example, Matheson (1992) has suggested that working in a medium where visual social cues are removed increases the focus on the restricted material that *is* available (rather as people who are visually impaired increase their aural and tactile awareness). In other words, we find new ways to discriminate between individuals. Status clues are found in domain names, 'signatures', literacy and computer literacy - - even displays of hacking . Clues about identity are also found in both <u>how</u> something is said and <u>what</u> is said. How something is said might hint at gender. There is considerable evidence that perceptions of basic patterns of gender-

based communication are 'at least replicated, if not magnified, in electronic communication' (Winter and Huff, 1996: 30). According to Hall (1996), studies on gender in CMC (see, for example, Herring, 1993; Tannen, 1994) parallel the earlier findings of feminist linguists. For instance, in online communication '[t]he male style is characterized by adversariality, put-downs, strong often contentious assertions, lengthy and/or frequent postings, self-promotion, and sarcasm. ... The female-gendered style, in contrast, has two aspects which typically co-occur: supportiveness and attenuation' (Herring, 1994: 3–4). It has been suggested that what is said has become, for instance, the new 'marker' for identifying ethnicity or 'race'. Deprived of physical cues provided by the body users examine 'an individual's perspectives, beliefs and attitudes to make assumptions about the individual's racial identity' (Burkhalter,1999: 63)

Let us consider these general findings in terms of the Graduates of the Millennium project. In this study a woman interviewer with a gender non-specific name 'Chris' interviewed male and female students who were perfectly at liberty to reply using their own name, a nickname, or no name at all. In fact, in this study, an initial questionnaire had provided a demographic database for each student and, as the university provided email addresses to named students, I was able to connect messages to gendered students in most cases. This of course was one of the aims of the study. However, some highly computer literate students would have been able to use a 'remailer' (which strips off all identifying information form messages) and some also had Hotmail accounts with email addresses I was not familiar with. In addition, I could not assume that the person who actually typed a message from one of my known email addresses actually WAS the person who owned the address

> Please pay no attention to that "scotsjohn and bob are fab" thing – just two of my more computer literate friends messing around'

The focus in virtual research must be on how interactants project status or personality cues within the constraints of an email exchange. How much information about identity might be exchanged and what are the implications for the power balance within an interview?

There is considerable evidence to show that, in FTF research, participants ascribe beliefs and opinions to a researcher on the basis of social status cues. This can affect researcher–participant dynamics, so that interviewers who are 'seen' differently will receive different replies to the same questions (Wilson, 1996: 97). Assuming that I was 'seen' as a woman what might the implications be? Working online, there is an assumption that if an interviewer is female it will lead to an increase in self-exposure from men (Kiesler *et al.*, 1985) and more openness and intimacy in (assumed) woman-to-woman discussions. The male psychiatrist who masqueraded as a woman to tap intimate confessional stories from women is a case in point (Van Gelder ,1991).

However, at the beginning of the Graduates of the Millillennium study, participating male and female students would not have been aware of the gender provenance of their email messages. There were

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originally two researchers, a man and a woman, involved in the overall project and both names were appended to all messages, although I was in fact the sole active interviewer. In the event, the gender of interviewers was almost never raised by participants. Even when I took over sole responsibility for the research, the very few comments referring to gender seemed to be stimulated by curiosity over my name: 'I think you're a woman but I can't be sure'. Only one message connected that assessment with a value judgment: 'I think you're a woman because you seem to care'. Nor did the tone of students' messages change when my colleague left and there began to be only my name on the outgoing messages. It felt as if individual students continued to respond to me in the same way as before - as if it was my written style they were responding to, rather than to the doubtful gender marker of my own name - or the even more ambiguous situation of having responses returned with two names at the bottom. Clearly, there may have been differences in the participants' responses if only one researcher with an unequivocally gendered name had conducted all the research from the beginning. Of course another option might be that they were responding to a 'university researcher' and that this level of categorization - in this study - was more significant than my gender.

As for myself, I realized that, as the students messages arrived, I registered any descriptive cues that were offered in the text and found myself assimilating these cues in an almost involuntary instinct towards grasping any indications of identity presented by the writer (Turkle, 1995: 207). If 'ordinary' names continued to be used over time I assumed that these were 'real' names - and might only check them against my database if something in a message didn't ring true. If a male Jo began to talk about getting into an all-women rowing team, for instance. When a nickname such as 'pole vaulting guy' was used I looked out for further evidence that the name reflected real life activities. If a nickname such as 'Cassandra' was used I looked out for signs that the student might have a tendency to foretell doom!

Most students also appended 'signatures' to their messages which were clearly a very self-conscious means of displaying favoured identity markers - particularly as the signatures would also appear on their messages to friends. Of course, interpreting whether signatures were sincere or ironic in style was not easy - if possible at all:

I think animal testing is a terrible idea; they get all nervous and give the wrong answers.

'If you want to be happy, be.' - Tolstoy.

'Work is the curse of the drinking classes' - Oscar Wilde.

"Could have walked in the sky but we stare at the wall...." Suede-

"He who fights with monsters should take care, lest he himself become a monster, for if you stare too long into the abyss, the abyss stares also into you" -Niezche

Gibbons have long arms. Very long arms. I kid you not.

"It's difficult to work in a group when you're omnipotent."

"Let's toss as men do" Bathsheba Everdeen, Far from the Madding Crowd

|D and P with the number 2i + 5 (which although complex is not as irrational as me!!!)
"Kind words can be short and easy to speak, but their echoes are truly endless" Mother Teresa.

Students also gave some deliberate and some possibly inadvertent social status markers in the body of their messages:

I have been worried that maybe I'm 'losing my roots' on the whole money issue...Being with people who go shopping and spend £60 [$90] on cosmetics because they're 'having a bad day' has also come as a bit of a shock to me!

There is definitely too much work to have a life - like if you want to play football, go to the pub and spend the next day recovering

I found it quite difficult to make friends at first, partially because of differences in social relations in Ireland and England.

More and more, classicists and teachers are having to justify the existence of classics in any taught form, when in my father's day it was an important part of his education.

To be blunt PMT is a major problem . Hormonal fragility means that if you don't have time for or can't do a piece of work it seems like the end of the world although at other times you'd just think 'sod it'.

Social status was also apparent through language use and content. Although this would not be the case in many research situations all messages in this study were homogenous in terms of the high levels of literacy displayed. The students' research contributions were fairly conversational in tone (without the slight formality of FTF student–staff interaction) but they did display a seriousness and focus which, even when laced with humour, marked their messages off from casual emails sent to friends. The messages conveyed the verbal virtuosity and dexterity of people who were very much at home with the written word and applied these advanced linguistic skills to their contributions as participants. The students moved easily, often in the same message, between a chatty engaging letter style and more discursive styles which exercised their fluency with words and syntax. Such multi-layered literacy skills allowed them to interact in ways which projected a convincing sense of personality, individuality and intellectual range - but which, for a lot of the time, did not hint at gender identity:

For followers of a discipline that's supposed to place emphasis on explanation and analysis of exactly HOW and WHY things are good/bad/ugly [English faculty staff] will rhapsodize about individual syllables in whoever-it-may-be they adore (who are by and large long dead and literally couldn't give a toss whether or not their synedoche are attracting admiration back in this strange place) yet they are little help for the living, content to scrawl "good [underlined twice]" or "avoid this" or whatever on what as far as I can tell - I'm sure it's not, but it may as well be - a blithely random basis.

It could be argued that many of the analytic (as opposed to more personal) messages did indeed generate data which appeared 'ungendered'. Whether other social markers found in language are unaffected by interview dynamics online is another matter. It seems likely that students with this level of linguistic expertise would quickly assess the level of language skill of the interviewer and would make adjustments

to their own writing if, for instance, the interviewer were to prove consistently more or less formal and/or more or less literate in address. I am unsure how long I would have kept the respect of English students if I'd made too many mistakes resulting in queries like this:

> In your final comment was it illusive you meant - like you wrote - or elusive?

Personal messages, and particularly messages about emotional issues, were a different matter. A considerable number of the personal messages which I confidently believe came from men were self-depreciating, sensitive, and self-exposing. In contrast, although many women would discuss emotional issues in a stereotypically open, self-disclosing and even slightly apologetic way, other women would talk in a direct even trenchant manner, challenging some of my questions and/or refusing to be drawn into areas they did not choose to discuss. Perhaps the emotional openness of some men and the self containment of some women were indeed aspects of gender identity that were made visible by the anonymity of the medium. For, in this study the lack of FTF interaction seemed to reduce concern about being evaluated and assessed. Many of the students felt that the anonymity allowed them to avoid the power dynamics of a person to person interview;

> In normal interviews respondents would have to think on their feet and might feel obliged to give 'expected' responses.

> From my point of view the use of e-mail has increased the amount of information that you've got out of me. I've said things in this study that I'd never have said to a person sitting in front of me for fear of what they might think.

Students saw the virtual venue as a place in which people could say exactly what they thought 'without fear of reprisals'. A direct contrast was drawn between this option and FTF interviews where 'people probably don't speak their mind'. As one student stated (as if the point was self-evident):

> Obviously actually talking face to face with people produces less honest responses.

These quotes raise important issues. Might students who refer to 'expected responses' be alluding to expectations of 'masculine' and 'feminine' behaviour as well as responses which might take a whistle blowing as opposed to a collusive position with reference to university life? If that is so then we may be talking about a research medium which, by losing the constraints of FTF interaction, does allow men and women to expose aspects of their identities which might otherwise have remained hidden. Certainly I felt that a number of students who 'came out' about their homosexuality online might not have done so FTF. However, one worrying aspect of students' responses to the medium was a tendency for many individuals to take the 'listening' interviewer on trust as a benign, if ephemeral, presence somewhere in cyberspace. For many students the *reality* seemed to be the computer screen itself.

> Email has affected the way I communicate so much. It brings me a lot closer to people, and in a way, although it's a computer screen, it brings out a lot more than speaking to some-one does. It allows you to speak spontaneously and in research such as yours, without any of the inhibitions that may come with speaking.

I ASSUME that you exist, somewhere, but it is much easier to articulate thoughts to a screen than a person.

It is easy to confide my feelings to the computer while at the same time your own encouraging responses have taken away any feelings of an impersonal approach.

These responses resonate with the view that the virtual venue is a safe space in which to interact. It is true that the physical space from which participants communicate may be familiar and relaxed, with the participant in control. But is interviewing in cyberspace really more safe than its FTF alternative? If participants are lulled by the technology into a possibly unfounded sense of trust they may be increasingly susceptible to a bullying, manipulative or even dishonest virtual interviewer. At a personal level the 'safeness' of the venue for participants must depend, as always, on the ethics of the researcher.

Authenticity online

Although data gathered through CMC may be interesting and insightful – if participants are virtual – what credence can be given to information transmitted online? Ethnographers working in cyberspace must 'develop a sense about the truthfulness and candour of their informants, just as ethnographers of the nonvirtual must' (Fernback, 1999: 216). How is it possible to defend data generated in a medium where anonymity and pseudonymity are the norm and where participants may choose to exploit virtuality to experiment with the presentation of self?

Electronic networking opens possibilities for deception because, as discussed above, many of the cues that normally circumscribe roles and which foster or inhibit participation are not present. Unlike FTF communication where participants are largely 'known' to each other, at least on a visual level, in the online environment there is no such recognition. Users of CMC can change the way they express their personalities, can switch genders or change their age, or become fantasy characters in virtual worlds. There are claims that CMC paves the way for identity to fracture into multiple and ever changing perceptions and projections of self. As consistency in identity has strong associations with authenticity these possibilities have clear implications for data.

There is a large body of opinion which suggests that the differences between self-presentation in real life and in (non-role-play) online communities are far less divergent than might be expected. Despite some experimentation with self-presentation online, there is a wide consensus that people still tend to perceive their identities and selves as 'integral and continuous' (Kendall, 1999: 61). For this reason it is seen to be difficult to sustain a persona which is quite divorced from the 'real' self. As Berger has argued, 'it is very difficult to pretend in this world. Normally, one becomes what one plays at' (1966: 98). While the listowner of the American chat group ECHO maintains that,

'much as we might dearly love to sometimes, we can't leave ourselves behind when we get online. Even when someone is just playing around or in disguise, something true is revealed, it is never completely invented' (Horn, 1998: 6).

Studies point to the psychological probability that self-presentation online will be an extension of the 'real' individual into a different social environment (Wallace, 1999). For instance, Bechar-Israeli's (1996) research on nickname use in chat rooms suggested that about 8% of users used their real names, 45% chose 'nicks' that related to themselves in some way, and only 6% chose nicks of a fanciful nature. Similarly, research into Web site home pages suggests that these pages:

Integrate the individual, make a personal statement of identity, and show in a stable replicable way what the individual stands for and what is deemed important. (Wynn and Katz, 1997: *online*)

As noted earlier, the Graduates of the millennium study had set up structures (such as the initial questionnaire) through which to identify students, but there was no mechanism to ensure that messages continued to come from the same person over time. Yet when I asked the students to reflect on possible future criticisms that their research contributions should be discounted because their identities could not be confirmed, many were indignant.

I am not virtual. I am very, very real. To say otherwise is an absurd objection (unless someone has stolen my password).

One student made clear that her real-life relationships depended upon sustaining as authentic a persona using email as any other form of communication:

If e-mail had nothing to do with the real us, our lives would fall apart; e-mail is as immediate, as common and as much to do with us as real people as talking on the telephone.

This is not to say that conscious self-presentation will not be a feature of online life for, as Giese (1998 online) asks: 'Who has not agonized over the "correct" tie or skirt to wear for that special occasion?' He concludes, as do others, that 'the rituals of self-presentation' will now be transferred to a textual mode. It is just that online the scope for controlling the presentation of self increases and participants may offer 'a filtered and posed representation of reality' Whittle (1997: 193). The struggle between being 'honest' and adding a bit of extra gloss to the online persona has been well documented and has implications for data:

In cyberspace you have more control over how someone sees you. Everything begins with words. You are who you say you are. And you can make yourself sound really good. (Horn, 1998: 294)

I was very concerned with being authentic and true to my real self via this electronic persona I was projecting, though I could not resist using the cover to heighten aspects of myself that I thought a bit inappropriate in person. (Argyle and Shields, 1996: 59)

The problem is that, in a study such as this where identity is being investigated, making oneself sound 'really good' may cover over some of the very things a researcher is looking for. On one hand the anonymity of the medium may indeed weaken hierarchies between the researcher and the participant -

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allowing participants the space to be more honest about their own perceptions of self. On the other hand it may be the aspects of the students identity which are most closely associated with the embodied self that are avoided online. This study did not have access to visual clues as to how an individual might 'do gender'. Also some students might seize on the medium as a place to escape being judged for having bad acne, the 'wrong' accent, an awkward social manner, a minority skin colour etc. - and yet these are the very things which I might have taken into account when considering narratives relating to students responses to the university environment.. And, even if participants are quite happy to share details about their embodied self online, it may be a lengthy process and valuable research time may be taken describing details which would have been immediately obvious FTF. It may also be a hit and miss process. It assumes that researchers can make enough of an imaginative leap to ask pertinent exploratory questions while working 'in the dark'; or that participants themselves will recognize aspects of their personal and social identity which are crucial to the research and will spontaneously proffer this information. These considerations potentially limit available data - although the Graduates of the Millennium study suggested that this problem may be alleviated when participants fully understand and support the research aims. In this situation they seem to grasp quite quickly which aspects of their lives are salient to the research study.

Information about the embodied self apart, the students claimed that their written texts conveyed more information about the self than would have been possible FTF. As already noted there was general agreement that, FTF, the potential for being judged, or the perceived obligation to give 'expected' responses, would have led to evasiveness or a level of dishonesty. Some students thought the rapid response made possible through email was likely to give the interviewer the most authentic data.

> If you respond to a set of questions immediately, there isn't the distortion of composing something that you think reflects well on you, or is what you think you should say, you can type whatever comes into your head, generally a very accurate insight into what you're thinking - not only at the time but what you deeply believe.

Other students were less confident that identity could be accessed with ease and transparency in any medium.

> I am conscious that the "I" I write is not the "I" I am - writing of yourself constructs and presents a persona, necessarily - but then so does speaking of yourself - we all self-edit and self-fashion all the time ... Perhaps the difference is that in oral conversation the gaps in the self-construction show, since it would be kind of improvised; writing leaves double opportunity for self-editing.

This quote raises all kinds of questions. If we assume that participants might prefer the 'double editing' of writing, does that mean that the resulting data are less 'close to truth' than data which arise from FTF methods? Or does it mean that a time for reflection can act as a safeguard, allowing participants to explore their thoughts and feelings more deeply and with more self-awareness than in FTF interaction? Perhaps interaction on- and off-line is a balancing act where participants make decisions relating to sharing or withholding information. And perhaps, in a disembodied environment, data have their own kind of depth and authenticity because, when words can be carefully processed to avoid unwelcome self-

exposure, participants may have the confidence to say more (and with more penetration) than they would risk in the *ad hoc* self-presentation that is possible FTF (see also Walther, 1996).

While CMC might tempt participants to garnish the truth about themselves, is it likely that, outside of communities such as role-playing MUDs, would many people deliberately present themselves as other than they are? And, in particular, would they use a research project to do so? There are FTF precedents for this kind of deception. Denzin reported how Garfinkel (1967) interviewed one participant 'Agnes' over several months. Many years later she revealed that she had duped him about the details of a sex change. As a result 'Garfinkel produced a document that told the story Agnes wanted told. He, in fact, wrote a fiction that, until Agnes' disclosure, had the appearance of truth' (Denzin, 1989: 38). On the other hand, how many participants would expend that amount of energy on deception? One Graduate of the Millennium student thought it would be a complete waste of time to do so:

> We could all be making everything up for a laugh- but I don't see why any student would feel compelled to feed you mis-truth over email - be realistic - where's the fun in sending prank e-mails to an social science researcher? Although due to time constraints they will of course not give you the whole truth!

Another student found it curious that a tendency to deceive might be more associated with CMC than other forms of communication:

> I'm actually rather offended that people might think e-mail was somehow less genuine than things I might say if I hand wrote or talked to you personally or whatever. Questionnaires also have indirect contact - are they any more or less likely to be more or less truthful or accurate or exact?

Detecting deceit is a necessary exercise in real-life as well as online communities. As Wallace (1999: 50–52) points out, psychological research has shown that most of us are poor judges of truthfulness. She notes that even professionals such as police and customs officers seemed unable to improve their deceit-detection capacities even with training (Kohnken, 1987). Fortunately, validity checks done on self-report studies in delinquency research suggest that the accuracy of an offender's statements is usually about 75% (see, for instance, Jupp, 1989). This relatively high level of truthfulness in a situation where it may often seem tempting to lie may reassure researchers (and ethics committees) that statements made online are probably *aiming* for truth. How might researchers decide that a participant is 'sincere and aiming for truth' (Seidman, 1991: 18)? Psychological studies point to some characteristics which may signal lying FTF, such as

> overcontrolled movements, reduced rate of speech, more vocal pauses, and higher voice pitch. It appears we have to concentrate to lie, and the effort diminishes some of the spontaneity of normal human interaction. (Wallace, 1999: 51)

It is with this kind of understanding in mind that Seidman recommended that transcripts and fieldnotes of FTF interaction be scrutinized for factors identifying sincerity and spontaneity; 'the syntax, the pauses, the groping for words, the self-effacing laughter' which would persuade the researcher of the speaker's authenticity (1991: 18). As with FTF researchers, online researchers may also get 'a feel' for what is happening. Wallace, drawing on research into deception in online messages (see Burgoon *et al.*,

1996) reported that suspicions are often aroused by evasive and indirect answers. 'There was a tendency for truthful subjects to use words in a slightly different way compared to non-truthful ones. Their words were somewhat more likely to be complete, direct, relevant, clear and personalized.' (1999: 52). But, in the final analysis, such assessment is subject to the same kind of intuition practiced by the FTF researcher. This intuition leads people to argue that they can gauge the sincerity, authenticity and individuality of disembodied CMC users; that 'it is definitely possible to get some "sense" of who is online and who they "really" are' (Giese, 1998). This quote from a different study reflects my own feelings:

> Many people trusted this 'other' that I gave them of myself, and they revealed parts of themselves to me in turn. What we exchanged was *real*. I felt it in my body that they were as honest about the facts of their lives, their confusions, their dreams, as I was. (Argyle and Shields, 1996: 59)

Within my own research it seemed to me that messages such as the one below, from a woman student, offers an authentic and convincing example of the kind of insight into gendered identity within the university that I was seeking.

> Here everyone seems to be incredibly gifted and brilliant, or extremely focused and hardworking or have done some amazingly exciting and important things (or a combination of these). I don't feel like I can claim anything like this. I'm not very clever, I have no idea what I want to do with my life and I don't feel I have ever done anything fantastically rewarding. Somehow, the fact that I manage to get through despite my general mediocrity makes me feel like a fraud. Each supervision I go to, every essay I hand in, each exam I sit I have the same problem; I always fear that I'll be 'found out'. At every supervision I half expect the supervisor to turn around and say " It's alright, I know all about you, you might as well go and start packing". It would almost be a relief....I keep expecting someone to jump out from behind my curtains and shout "You've been framed!" or to be told that I am a random psychological guinea-pig in some highly complex experiment. This year I am trying to work harder in an attempt to at least feel like a 'worthy' fraud. That way, I can at least point to the work I have done and explain my non-discovery by that means. I'm sure this all sounds completely ridiculous and stupid and I have to admit that I'm often embarrassed that I feel this way, but I can't help it. I hope some of this can be useful somehow, otherwise I'm sorry to have clogged your in-box with strange ramblings...

The difficulty with intuitive knowledge is that it offers a doubtfulpublic defence for the integrity of data. Further assurances may be needed in some kinds of study and for some audiences. For instance, there will be situations where it is essential that participants fulfill particular demographic criteria. Here concrete forms of verification may be needed. However, where researchers want participants to be able to talk from a particular standpoint of life experience or situation, the appropriateness of the data would soon beomce evident. Different criteria for establishing trust may be needed in longitudinal studies. Seidman, working FTF, has already alerted qualitative researchers to the reassurance that may be found in participants' reports that show internal consistence over a period of time (1991: 18). Online studies confirm that repeated interaction with participants not only establishes trust but also compensates for the 'masking' of identities. It is generally accepted that it is difficult for people to sustain untruths when

involved in long-term, intensive interactions' (Bennett, 1998: 36). This was certainly the view of the students in my study:

> Being "virtual students" might be a problem if this was just a short study. But the fact that those of us taking part have been replying for so long (not a criticism!) makes it unlikely that anyone who was concerned with being completely untruthful would have bothered to continue to respond.

It is clear that qualitative researchers will continue to struggle with the implications of disembodiment for as long as CMC is a mainly text-based medium of research. At the moment most researchers and participants who engage in online research tend to take a fairly philosophical view of the situation. As with FTF research, human interaction is a matter of establishing trust and this is a two-way process, as a student in my study made clear: 'You receive information from "virtual" students but look at it the other way round: we give information to virtual researchers!'. This necessarily philosophical and pragmatic approach will of course always be open to criticism, and criticism that is difficult to counter without, as discussed above, resorting to the questionable defence of intuition. However, such criticism is most likely to come from those with little personal experience of CMC. As this experience becomes more and more common, and trust in the medium grows, it is likely that the perceived potential for duplicity in online communication will diminish until it is no greater than for communication FTF.

So how would I rate sequential email interviews as a vehicle for investigating identity? Although I have not had time to discuss it here I do believe that rapport online is possible (see Mann and Stewart, 2000). Researchers and participants will find ways to compensate, at an interpersonal level, for the loss of embodiment. Nevertheless, taking the other aspects of CMC considered here into account, it must be admitted that email interviews have strengths and weaknesses at both practical and methodological levels when it comes to investigating identity (*ibid.*). However, there is no doubt that this kind of method will be adopted and then analyzed by researchers in the future and gradually we will begin to identify where its essential characteristics - and hence opportunities - lie.

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